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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,181	09/12/2003	Mark G. Smith	81079903/202-1623	2180

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EXAMINER

TANNER, HARRY B

ART UNIT PAPER NUMBER

3744

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,181	SMITH, MARK G.	
	Examiner	Art Unit	
	Harry B. Tanner	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-24 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's election without traverse of the invention of Group I in the reply filed on 10/20/05 is acknowledged.

Claims 13-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/20/05.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al in view of Shaffer, Jr. Ueda discloses the invention substantially as claimed. Ueda discloses a cooling system for a vehicle having first 17 and second 42 spaces cooled by first 20 and second 28 evaporators in which valve 24 stops flow to the second evaporator in response to a sensor 30 indicative of the temperature of air exiting the second evaporator. Shaffer teaches control of the compressor 12 and evaporator flow control valves 28 of two evaporators in response to the cooling needs of the two cooled spaces such that the valve of each evaporator is closed when the space does not need cooling and the compressor is stopped when neither space needs cooling. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Ueda such that it included the use control of the compressor and evaporator flow control valves of the two evaporators in response to the cooling needs of the two cooled spaces such that the valve of each evaporator is

closed when the space does not need cooling and the compressor is stopped when neither space needs cooling in view of the teachings of Shaffer.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al in view of Shaffer, Jr as applied to claim 1 above, and further in view of Kimishima et al. Kimishima teaches the use of a reservoir 26 at the compressor 24 inlet in order to store refrigerant and separate liquid and vapor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Ueda such that it included the use of a reservoir at the compressor inlet in order to store refrigerant and separate liquid and vapor in view of the teachings of Kimishima.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al in view of Shaffer, Jr as applied to claim 7 above, and further in view of Campbell et al. Campbell teaches the use of a pressure sensitive device at the compressor outlet to operate a condenser fan when pressure is above a given amount and to stop the compressor when pressure is above another given amount (see col. 11, lines 19-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Ueda such that it included the use of a pressure sensitive device at the compressor outlet to operate a condenser fan when pressure is above a given amount and to stop the compressor when pressure is above another given amount in view of the teachings of Campbell.


Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21-24 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry B. Tanner whose telephone number is (571) 272-4813. The examiner can normally be reached 8:30 am to 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler, can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Harry B. Tanner". The signature is stylized with a large, looped "H" and a cursive "Tanner".

Harry B. Tanner
Primary Examiner
Art Unit 3744